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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
07/595,733	10/10/90	WILSON	R

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EXAMINER	
NOLAN, S	
ART UNIT	**PAPER NUMBER**
1805	15

DATE MAILED: 12/03/91

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 10-10-90 + 11-29-91 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), ____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☑ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, Form PTO-152
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 75-97 are pending in the application.

   Of the above, claims _____ are withdrawn from consideration.

2. ☒ Claims 1-74 have been cancelled.
3. ☒ Claims 75-94 + 96-97 are allowed.
4. ☒ Claims 95 are rejected. 15
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☒ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☒ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

PTOL-326 (Rev.9-89)

This Office Action is responsive to the Preliminary Amendment filed 10-10-90 and to the Amendment faxed on 11-29-91.

Claim 95 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 95 is vague and indefinite in the recitation of "wherein the GS and desired protein coding sequences are linked such that amplification of the GS coding sequences results in co-amplification of the desired ..". It is not clear if this is intended to describe some physical relationship, and if so, just what structure is intended.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> "A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

Claim 95 is rejected under 35 U.S.C. 103 as being unpatentable over Sanders et al in view of Pennica et al.

Sanders et al teaches the cloning of the partial GS gene.

Pennica et al teaches the cloning of the tPA gene, including how to obtain a full sequence when initially only a partial sequence is obtained.

The claimed vector comprises a complete sequence of the GS gene and a complete sequence of a gene encoding a desired protein.

It is considered that it would have been obvious over the teachings of Sanders et al and Pennica et al to construct a vector which comprises a full GS sequence. It is frequently the case that one obtains only a partial cDNA sequence initially because the reverse transcriptase begins at the 3' end of the mRNA and may "fall off" before reaching the 5' end. There are various ways to solve this problem including those taught in Pennica et al. One would be motivated to obtain the entire GS gene sequence because the entire sequence is needed to produce the protein recombinantly.

Applicant has amended the claims to include a limitation of intended use. Said limitation does not overcome the rejection for two reasons: a) intended use does not affect the patentability of a composition claim, and b) there is no teaching in the specification nor limitation in the claim of a critical element or structure which is not present in the combination of references under which the claim has been rejected.

The claimed invention is therefore considered obvious over prior art teaching the partial sequence (Sanders et al) and methods of obtaining a full sequence once the partial is in hand (Pennica et al).

Claims 75-94 and 96-97 are allowable over the prior art of record.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Nolan whose telephone number is (703) 308-0281. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

RICHARD A. SCHWARTZ
SUPERVISORY PATENT EXAMINER
ART UNIT 185